Catalogue of American Amphibians and Reptiles.

Russell, A.P. and A.M. Bauer. 1991. *Anolis opalinus.*

Anolis opalinus Gosse
Opalescent Anole

Anolis opalinus Gosse, 1850:345. Type-locality, "Jamaica", restricted to Bluefields, Westmoreland, Jamaica by Underwood and Williams (1959). Holotype not designated (subsequently given as British Museum (Natural History) (BMNH) 1946.8.5.50, formerly 47.12.27.42), collected by P. H. Gosse, date of collection unknown (examined by authors). See Nomenclatural History.
Anolis grahami: O'Shaughnessy, 1875:273 (part).
Anolis flabellatus Cope, 1894 (1895):439. Type-locality, "Port Morant and Port Lucea [Jamaica]". Holotype not designated, collected by J. Percy Moore in 1890 or 1891.
Anolis lineatopus: Barbour, 1922:668 (part).
Norops opalinus: Schwartz and Henderson, 1988:158.

• **Content.** No subspecies are currently recognized.

• **Definition.** *Anolis opalinus* is a member of the *A. grahami* series (Williams, 1976). This gracile anole is the smallest Jamaican member of the genus. Males may reach 53 mm and females 44 mm SVL, respectively (Schwartz and Henderson, 1991). Tail lengths are approximately 1.7 and 1.5 times SVL for males and females, respectively. The dorsal scales are small and granular. An erectile nuchal fold and a dorsal fold are present. The ventral scales are larger than the dorsals, smooth and slightly imbricate. The body color is typically olive to grey, with irregular mottling on the dorsum. A pale stripe runs from the labial region to the flank. The sacrum often has paired pale markings. Blue pigment may be present at the tail base. The venter is light and opalescent. Females and young exhibit dark striping on the chin and throat. Males have a burnt orange dewlap with a yellowish center and a cream to yellow border. The dewlap is rudimentary in females.

• **Descriptions.** In addition to the type descriptions of Gosse (1850) and Cope (1894 [1895]), detailed descriptions are also provided by Grant (1940), Underwood and Williams (1959), and Schwartz and Henderson (1991).

• **Illustrations.** A color illustration of the head and forebody of *A. opalinus* is included in Schwartz and Henderson (1985). Cope (1894 [1895]) depicted details of scalation. Jenssen (1978) graphed head bobbing display patterns.

• **Distribution.** *Anolis opalinus* is endemic to Jamaica. It occurs throughout the island, from sea level to over 1500 m. Barbour (1914, 1937) indicated that he considered it to be generally rare and common only around villages, due to mongoose predation elsewhere. It appears, however, that it may be very abundant locally (Grant, 1940; A. P. Russell, pers. obs.) and prefers mesic habitats. It is essentially arboreal but may be saxicolous where suitable habitat occurs, often occupying the crevices of dry stone walls. Individuals may be found in close proximity to human habitations, but they are not true commensals. Locality records are sparse in south central and northwestern parts of Jamaica.

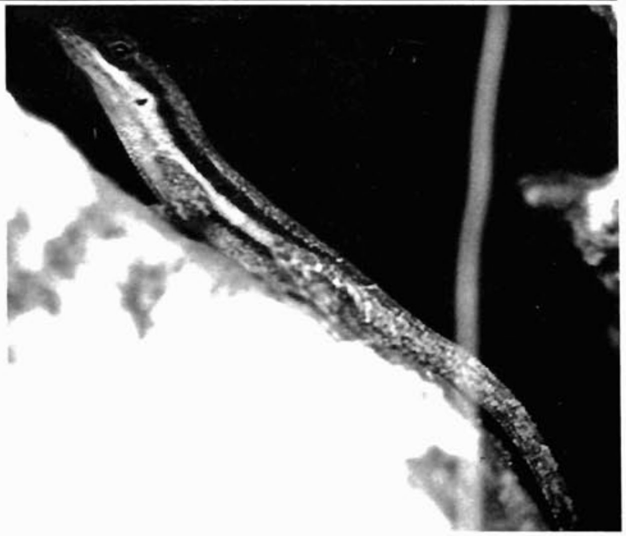
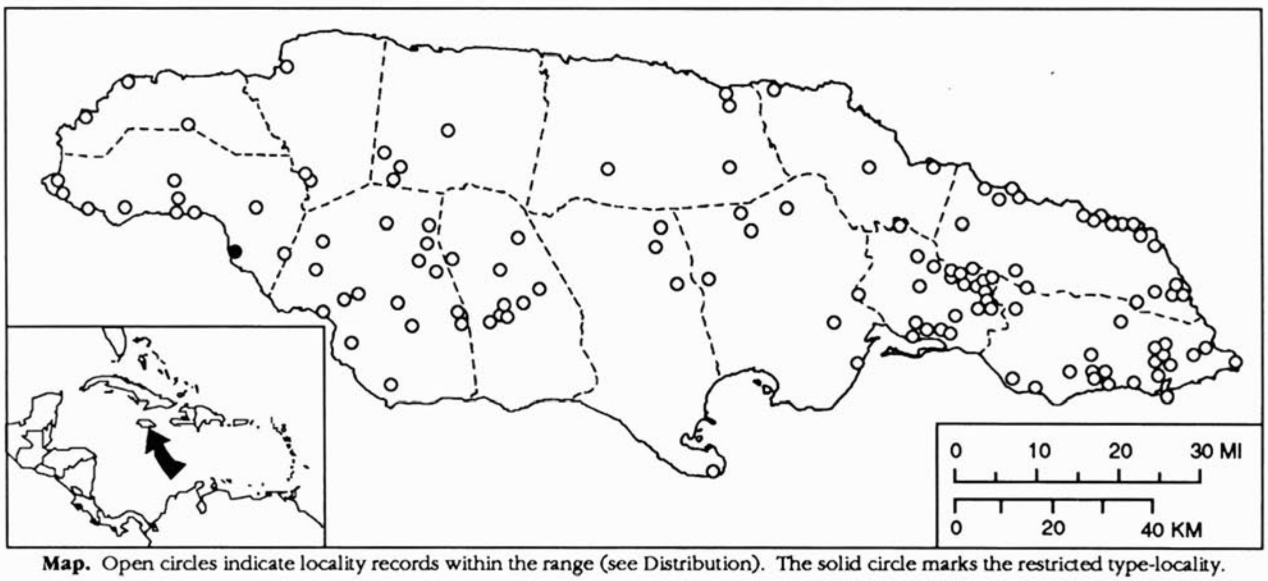


Figure. Male *Anolis opalinus* from Marlborough airstrip, Mandeville, Jamaica. Photograph by Anthony P. Russell.

• **Fossil Record.** None.

• **Pertinent Literature.** The most comprehensive systematic treatment is that of Underwood and Williams (1959), who with Grant (1940) summarized the general biology of *A. opalinus*. Hedges and Burnell (1990) used electrophoresis to examine phylogeny and biogeography. Important contributions concerning the ecology of *A. opalinus* have been made by Barbour (1914), Lazell (1966), Rand (1967a), Schoener (1970a, b), Schoener and Schoener (1971), Williams (1972, 1983), Jenssen (1973), Lister (1976a, b), and Williams and Rand (1977). Haefner (1988) analyzed the assembly rules of Jamaican anole communities, including data pertinent to *A. opalinus*. Losos (1990a, b) studied the coevolution of ecological, morphological, and behavioral attributes of members of West Indian *Anolis* communities, including *A. opalinus*. Diet and growth were studied by Floyd and Jenssen (1983, 1984) and Jenssen and Andrews (1984). Rand (1967b) and Jenssen (1978, 1979a, b) examined behavior, and Andrews and Rand (1974) discussed reproductive energetics. Immunology has



Map. Open circles indicate locality records within the range (see Distribution). The solid circle marks the restricted type-locality.

been discussed by Shochat and Dessauer (1981), and karyology by Gorman (1973) and Gorman and Atkins (1968). Fite and Lister (1981) studied vision. Telford (1975) reported on blood parasites. Lefcourt and Blaustein (1991) used data on intestinal parasite infections from Bundy et al. (1987) to test the Hamilton and Zuk hypothesis. The species was employed by Janzen and Paukstis (1991) in a study of environmental sex determination in reptiles.

• **Nomenclatural History.** Although the original description of this species clearly refers to *A. opalinus*, the putative type is not of this taxon but appears to be a juvenile specimen of *Anolis grahami* (Grant, 1940; Underwood and Williams, 1959). In a thorough discussion of the matter, Underwood and Williams (1959) pointed out that Gosse's (1850) description apparently was of a living animal and, although he referred therein to several specimens in the British Museum, never explicitly designated them as types. Much of the Jamaican material originally sent by Gosse to the British Museum had become hopelessly intermingled over the years, because even type-specimens were not labeled. *Anolis opalinus* has been confused with *A. grahami* (O'Shaughnessy, 1875; Boulenger, 1885; Barbour, 1910, 1937) and *A. lineatopus* (Barbour, 1922). These errors may stem from the incongruity between the original description and the putative type-specimen.

• **Etymology.** The name *opalinus*, (L., "like an opal"), refers to the distinctive ventral coloration of the species.

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